



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
	10/751,707	01/05/2004	Jose Santiago Rolla	114	2268	
	43007	7590 06/15/2005		EXAM	IINER	
	PAUL L. BR	OWN		BELLINGE	BELLINGER, JASON R	
	EMRICH & D	ITHMAR, LLC			· · · · · · · · · · · · · · · · · · ·	
	125 SOUTH WACKER DRIVE, SUITE 2080 CHICAGO, IL 60606-4401		ART UNIT	PAPER NUMBER		
			3617			

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	10/751,707	ROLLA, JOSE SANTIAGO			
Office Action Summary	Examiner	Art Unit			
	Jason R. Bellinger	3617			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status					
1) Responsive to communication(s) filed on 15 April 2005.					
2a) ☐ This action is FINAL . 2b) ☑ This	action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
5) ☐ Claim(s) is/are allowed. 6) ☑ Claim(s) <u>1-9,11,13-19 and 32-35</u> is/are rejected 7) ☐ Claim(s) is/are objected to.	4a) Of the above claim(s) 10,12 and 20-31 is/are withdrawn from consideration. Claim(s) is/are allowed. Claim(s) 1-9,11,13-19 and 32-35 is/are rejected. Claim(s) is/are objected to.				
Application Papers					
 9) ☐ The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on <u>05 January 2004</u> is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. 					
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) □ All b) □ Some * c) ⊠ None of: 1. ☑ Certified copies of the priority documents have been received. 2. □ Certified copies of the priority documents have been received in Application No 3. □ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.					
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 4/8/04.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa				

HU

Art Unit: 3617

Election/Restrictions

1. Applicant's election without traverse of run-flat assembly subspecies I, drawn to Figures 1-4, 6-7, and 25, in the reply filed on 15 April 2005 is acknowledged.

Claims 20-31 are withdrawn from further consideration pursuant to 37 CFR
 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made without traverse in the reply filed on 15 April 2005.

Claims 10 and 12 are also withdrawn from consideration, due to the fact that these claims are drawn to nonelected species of the invention.

Priority

3. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Argentina on 26 September 2003. It is noted, however, that applicant has not filed a certified copy of the P030103519 application as required by 35 U.S.C. 119(b).

Information Disclosure Statement

4. The information disclosure statement filed 13 May 2004 is a duplicate copy of the IDS filed 8 April 2004. It has been placed in the application file, but the information referred to therein has not been considered as to the merits.

_

Oath/Declaration

5. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because: It does not state that the person making the oath or declaration has reviewed and understands the contents of the specification, **including the claims**, as amended by any amendment specifically referred to in the oath or declaration.

Drawings

6. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the rim including bearing means, namely roller bearings, inserted between the inner wheel and the bottom of the annular depression of the rim, as set forth in claim 19, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering

Application/Control Number: 10/751,707

Art Unit: 3617

of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

7. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 18, 20-21, 26-28, 31-33, and 43.

Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

8. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "23" has been used to designate both a groove (Figure 11)

and an inner edge (Figures 8-11). Reference character "42" has been used to designate both the unthreaded sector of the rim part 4 and an inner surface of the rim part 5 in Figure 25C.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

9. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "comprises", "means", and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Application/Control Number: 10/751,707

Art Unit: 3617

10. The abstract of the disclosure is objected to because the term "tire" should be removed from the phrase "tire rim", due to the fact that a rim is actually an element of a wheel and not a tire. The phrase "side holding rims" should be replaced with the term -- flanges-- to more clearly describe the invention. The term "them" should be replaced with the phrase --the tire-- in line 10 to more clearly define the invention. Lines 11-12 should be revised to more clearly describe the invention, due to the fact that it is currently unclear what is actually being described in these lines.

Page 6

Correction is required. See MPEP § 608.01(b).

11. The disclosure is objected to because of the following informalities: In lines 18 and 20 of page 6, reference character 23 is used to reference two different elements, namely a groove and an inner edge.

Appropriate correction is required.

12. A substitute specification, including the claims, in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is required. The specification and claims appear to be a literal translation of a foreign document, and are therefore replete with grammatical errors and unclear language.

The substitute specification filed must be accompanied by a statement that it contains no new matter.

Art Unit: 3617

13. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: A Demountable Rim with Run-flat Capability.

Claim Objections

14. Claims 1-9, 11, 13-19, and 32-35 are objected to because of the following informalities: The term "tire" should be removed from the phrase "tire rim" throughout the claims, due to the fact that a rim is actually an element of a wheel and not a tire.

It is believed that the term "of" should be replaced with the term --for-- in line 7 of claim 1, due to the fact that a tire does not include "side holding rims".

The phrase "side holding rims" should be replaced with the term --flanges-- in claims 1 and 11 to more clearly describe the invention. It is believed that the phrase "side rims" should be replaced with the term --flanges-- in claim 33 also.

In line 3 of claim 4, the term "each" should be deleted prior to the term "threaded" for grammatical clarity.

The term "faced" should be replaced with the term --face-- in line 5 of claim 6 for grammatical clarity.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

15. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Application/Control Number: 10/751,707

Art Unit: 3617

16. Claims 1-9, 11, 13-19, 32-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 is indefinite due to the fact that it is unclear what element of the invention be being referred to by the term "it" in line 3. It is unclear what element(s) of the invention is/are being referred to by the term "they" in line 10. It is unclear how the tire "shows modifications", as set forth in lines 12-13.

Claim 2 is indefinite due to the fact that it is unclear how the complementary annular parts "conform" assembly means for the spare inner wheel.

Claim 4 is indefinite due to the fact that it is unclear what is being described by the phrase "being these different sectors" in line 7. It is unclear what element(s) of the invention is/are being referred to by the term "they" in line 8. It is unclear what the last line of the claim is actually claiming.

Claim 6 is indefinite due to the fact that it is unclear what element of the invention includes "both edges".

Claim 9 is indefinite due to the fact that it is unclear what element of the invention is being described as a "sliding and slipping track".

Claim 11 is indefinite due to the fact that it is unclear what is actually being claimed in line 4 of the claim. The claim is further indefinite due to the fact that it is unclear what element(s) is/are being referred to by the term "their" in line 6. The claim is further indefinite due to the fact that it is unclear what is being described by the term "overrunning".

Application/Control Number: 10/751,707

Art Unit: 3617

Claim 13 is indefinite due to the fact that it is unclear what is being claimed by the phrase "contact and tightness even surfaces" in the last line of the claim.

Claim 14 is indefinite due to the fact that it is unclear what is being claimed by the phrase "contact and tightness surfaces" in line 3 of the claim.

Claim 15 is indefinite due to the fact that it is unclear what element of the invention includes opposite surfaces, as set forth in line 3 of the claim. It is further unclear what is being claimed in the last line of the claim.

Claim 16 is indefinite due to the fact that it is unclear what element of the invention includes opposite surfaces.

Claim 32 is indefinite due to the fact that it is unclear what is being claimed by the phrase "as a means to modify on them" in line 5. It is further unclear what element(s) is/are being referred to by the term "them" in line 5.

Claim 33 is indefinite due to the fact that it is unclear whether the phrase "both side rims" in line 4 of the claim is referring to the "side holding rims" or the "side elastic holding rims" previously set forth in the claims.

The phrase "a spare inner wheel" in line 11 of claim 1 is a double recitation. This limitation has been previously set forth in line 4 of the claim. Therefore it is unclear whether or not the "spare inner wheel" set forth in line 11 is the same element as that set forth in line 4, or an additional element of the invention.

The phrase "a spare inner wheel" in lines 3-4 of claim 2 is a triple recitation. This limitation has been previously set forth in line 4 of claim 1. Therefore it is unclear

whether or not the "spare inner wheel" set forth in lines 3-4 of claim 2 is the same element as that set forth in line 4 of claim 1, or an additional element of the invention.

The phrase "a spare inner wheel" in lines 3 of claim 17 is a quadruple recitation. This limitation has been previously set forth in line 4 of claim 1. Therefore it is unclear whether or not the "spare inner wheel" set forth in lines 3 of claim 17 is the same element as that set forth in line 4 of claim 1, or an additional element of the invention.

- 17. The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.
- 18. Claim 1 recites the limitations "said flat tire", "both side parts", and "side holding rims" in lines 4, 6, and 7. There is insufficient antecedent basis for these limitations in the claim. These limitations have not been previously set forth in the claim.
- 19. Claim 6 recites the limitation "both edges" in line5. There is insufficient antecedent basis for this limitation in the claim. This limitation has not been previously set forth in the claim.
- 20. Claim 11 recites the limitation "side holding elastic rims" in line 4. There is insufficient antecedent basis for this limitation in the claim. No structure for the spare inner wheel has been previously set forth in the claims.

Art Unit: 3617

Claim 11 recites the limitation "the side edges" in line 5. There is insufficient antecedent basis for this limitation in the claim. This limitation has not been previously set forth in the claims.

- 21. Claim 15 recites the limitation "the opposite surfaces" in line 3. There is insufficient antecedent basis for this limitation in the claim. This limitation has not been previously set forth in the claims.
- 22. Claim 17 recites the limitation "said inner wheel" in line 4. There is insufficient antecedent basis for this limitation in the claim. This limitation has not been previously set forth in the claims. It is further unclear whether or not this limitation is the same element as the "spare inner wheel" previously set forth in the claims, or an additional element of the invention.
- 23. Claim 32 recites the limitation "each lateral segment" in line 3. There is insufficient antecedent basis for this limitation in the claim. This limitation has not been previously set forth in the claims.
- 24. Claim 33 recites the limitations "the lateral segments", "the lip", "the annular ledge", and "both side rims" in lines 2-3, 3, 4, and 4, respectively. There is insufficient antecedent basis for these limitations in the claim. These limitations have not been previously set forth in the claims.

Art Unit: 3617

25. Claim 34 recites the limitation "both inner edges" in line 3. There is insufficient antecedent basis for this limitation in the claim. This limitation has not been previously set forth in the claims.

- 26. Claim 35 recites the limitation "the inner wheel" in lines 4 and 5. There is insufficient antecedent basis for this limitation in the claim. It is unclear whether or not this limitation is referring to the "spare inner wheel" previously set forth in the claims, or is another element of the invention.
- 27. Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). As best understood, the term "spindrift" in claim 4 is used by the claim to mean "circular", while the accepted meaning is "sea spray, especially spray blown from waves during a gale" or "fine wind-borne snow or sand". The term is indefinite because the specification does not clearly redefine the term.

Art Unit: 3617

Claim Rejections - 35 USC § 102

28. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 29. Claims 1-2, 5-6, 8, and 13-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Trebaol. As best understood, Trebaol shows in Figure 2, a demountable wheel/rim having one or more "spare inner wheel(s)" (30, 32) to interact with a flat tire. The rim includes at least two complementary annular parts (10, 12) with flanges for retaining a tire 18 thereon. Each complementary annular part (10, 12) includes reciprocal coupling means (26-27) and includes an assembly means (namely a weld and/or the coupling means 26-27) for the spare inner wheel (30, 32). The tire 18 is adapted to run under a flat condition due to the spare inner wheel (30, 32).

The spare inner wheel (30, 32) has a diameter that is larger than the diameter of the rim. The reciprocal coupling means (26-27) act as complementary interconnection and fixation means; and consist of a plurality of sets of equal and equally spaced openings 25 that are distributed on a flange of the perimeter of a complementary part 12 to form a passage for fixation screws 26 located on a flange of the perimeter of the other complementary part 10. The assembly means for the spare inner wheel (30, 32) includes an annular depression with side edges that are provided by both complementary parts (10, 12).

The reciprocal coupling means (26-27) are provided at contact and tightness even surfaces (namely the inner flanges of each complementary part (10-12)), which include concentric annular ledges with reciprocal insertion arrangements with respect to one another. A laterally flat annular elastomeric joint 24 with even side surfaces is provided between the opposite surfaces of the complementary parts (10, 12).

The spare inner wheel (30, 32) is assembled in the annular depression formed by both complementary parts (10, 12). The spare inner wheel (30, 32) forms cooperation means 52 with the retention means (26-27).

30. Claims 1-2, 5-6, 8-9, and 13-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Smith et al. As best understood, Smith et al shows a demountable rim 9 having one or more "spare inner wheel(s)" 1 to interact with a flat tire. The rim 9 includes at least two complementary annular parts (10, 14, 18) with flanges for retaining a tire 17 thereon. Each complementary annular part (10, 14, 18) includes reciprocal coupling means 15 and includes an assembly means 8 for the spare inner wheel 1. The tire 17 is adapted to run under a flat condition due to the spare inner wheel 1.

The spare inner wheel 1 has a diameter that is larger than the diameter of the rim 9. The reciprocal coupling means 15 act as complementary interconnection and fixation means; and consist of a plurality of sets of equal and equally spaced openings that are distributed on a flange of the perimeter of a complementary part 14 to form a passage for fixation screws 15 located on a flange of the perimeter of another complementary part 18. The assembly means for the spare inner wheel 1 includes an annular

depression with side edges that are provided by complementary parts (10, 18). This depression provides a "sliding and slipping track" for the spare inner wheel 1, allowing the spare inner wheel to be mounted upon the rim 9.

The reciprocal coupling means 15 are provided at contact and tightness even surfaces (namely the surface of complementary part 14), which include concentric annular ledges with reciprocal insertion arrangements with respect to one another.

Claim Rejections - 35 USC § 103

- **31.** The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Trebaol contains all of the limitations as set forth in paragraph 29 above, but does not show the complementary parts being interconnected and fixated by lock-pin bolts.

 However, one of ordinary skill in the art at the time of the invention would have found it obvious to connect the complementary parts of Trebaol with lock-pin bolts as a substitution of equivalent fastening means, dependent upon availability and cost.
- 33. Claims 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trebaol as applied to claims 1-2, 5-8, and 13-18 above, and further in view of Harris. As best understood, Trebaol does not show lateral segments of the tire including a plurality

of recesses and ledges that interact with mating recesses and ledges of the flanges of the rim.

Harris teaches the use of a tire 10 having recesses and ledges (23-24) located on lateral segments of the tire 10 that interact with mating recesses and ledges (21-22) of the flange 16 of the rim 13. Therefore from this teaching, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the tire and rim of Trebaol with the configuration of the tire and rim taught by Harris for the purpose of preventing rotation of the tire relative to the wheel rim during operation in both the inflated and uninflated conditions, and further reducing the possibility of the tire coming off the wheel during run-flat operation.

34. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Trebaol as applied to claims 1-2, 5-8, and 13-18 above, and further in view of Riley. As best understood, Trebaol does not show the tire including a plurality of parallel ledges on the inner surface of the tread section to form bearing means that is guided on the spare inner wheel during run-flat running.

Figure 7 of Riley teaches a tire 86 having a plurality of parallel ledges (90, 92) on the inner surface of the tread section of the tire 86, that form bearing means during a run-flat condition. Therefore from this teaching, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the tire of Trebaol with the ledge bearing means of Riley for the purpose of providing additional run-flat supports.

The spare inner wheel (30, 32) of Trebaol would guide the ledges (90, 92) taught by Riley during a run-flat condition of the tire, thus preventing the tire from coming off the wheel during run-flat operation.

35. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al in view of Hollerith. Smith et al contains all of the limitations as set forth in paragraph 30 above, but does not show the reciprocal coupling means being continuous threads formed on coupling edges of the complementary annular parts.

Hollerith teaches the use of a demountable rim having complementary annular parts (1, 12) having continuous threaded reciprocal coupling means (7, 18) formed on coupling edges of each complementary part (1, 12). Therefore from this teaching, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the rim of Smith et al with complementary parts with continuous threaded reciprocal coupling means for the purpose of reducing the number of parts of the rim assembly, while still providing a secure means of fastening the complementary parts together.

36. Claims 7 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al. Smith et al contains all of the limitations as set forth in paragraph 30 above, but does not show the complementary parts being interconnected and fixated by lock-pin bolts. However, one of ordinary skill in the art at the time of the invention would have found it obvious to connect the complementary parts of Smith et al with lock-pin

bolts as a substitution of equivalent fastening means, dependent upon availability and cost.

Page 18

Smith et al shows an annular elastomeric joint (namely an o-ring) 11 located between opposite surfaces of complementary parts (10 and 18). Smith et al does not specify that this joint include laterally flat side surfaces with a plurality of concentric annular edges. However, it is well known in the art that o-rings may have a variety of cross sectional shapes, including round, and polygonal (such as square, rectangular, etc; all of which would have laterally flat side surfaces with a plurality of concentric annular edges). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the rim of Smith et al with an elastomeric joint having any shape suitable to provide an airtight sealed rim.

37. Claims 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al as applied to claims 1-2, 5-6, 8-9, and 13-14 above, and further in view of Harris. As best understood, Smith et al does not show lateral segments of the tire including a plurality of recesses and ledges that interact with mating recesses and ledges of the flanges of the rim.

Harris teaches the use of a tire 10 having recesses and ledges (23-24) located on lateral segments of the tire 10 that interact with mating recesses and ledges (21-22) of the flange 16 of the rim 13. Therefore from this teaching, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the tire and rim of Smith et al with the configuration of the tire and rim taught by Harris for the purpose of

preventing rotation of the tire relative to the wheel rim during operation in both the inflated and uninflated conditions, and further reducing the possibility of the tire coming off the wheel during run-flat operation.

38. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al as applied to claims 1-2, 5-6, 8-9, and 13-14 above, and further in view of Riley. As best understood, Smith et al does not show the tire including a plurality of parallel ledges on the inner surface of the tread section to form bearing means that is guided on the spare inner wheel during run-flat running.

Figure 7 of Riley teaches a tire 86 having a plurality of parallel ledges (90, 92) on the inner surface of the tread section of the tire 86, that form bearing means during a run-flat condition. Therefore from this teaching, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the tire of Smith et al with the ledge bearing means of Riley for the purpose of providing additional run-flat supports.

The spare inner wheel 1 of Smith et al would guide the ledges (90, 92) taught by Riley during a run-flat condition of the tire, thus preventing the tire from coming off the wheel during run-flat operation.

Conclusion

39. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references are considered to show demountable rims

Art Unit: 3617

including run-flat means mounted therein. For example, Patecell shows a rim of the type described above.

40. Claims 4, 11, and 19 have not been rejected under prior art, however determination of allowability of these claims is being withheld until clarification of the limitations of these claims regarding 35 USC 112, second paragraph issues resulting from a possible literal translation of a foreign document.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason R. Bellinger whose telephone number is 703-308-6298. The examiner can normally be reached on Mon - Thurs (9:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Morano can be reached on 703-308-0230. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jason R Bellinger Examiner Art Unit 3617

JASON R. BELLINGER PATENT EXAMASER

jrb Mis